

Notice of Allowability

Application No.

10/023,094

Examiner

Michael J. Moore, Jr.

Applicant(s)

OUYANG ET AL.

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 8/8/07.
2. ☒ The allowed claim(s) is/are 1,2,4,6-19,21 and 23-26 (renumbered 1-22, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Response to Arguments

1. Applicant's arguments with respect to claims **1, 4, 6, 7, and 25** have been fully considered and are persuasive. The rejections of these claims under 35 U.S.C. 103(a) have been withdrawn.

Allowable Subject Matter

2. Claims **1, 2, 4, 6-19, 21, 23-26** (*renumbered 1-22, respectively*) are allowed.
3. The following is an examiner's statement of reasons for allowance:

Regarding claim **1**, *Malkamaki* (U.S. 2002/0172208) teaches the reception of various physical channels used to convey data blocks (received packet) and respective sequence numbers by a PHY module 12c (first storage medium) as spoken of on page 3, paragraph 34.

Malkamaki also teaches the determining of whether a received data block (packet) is a retransmitted data block by comparison of the sequence number (field) of the received data block to sequence numbers (corresponding field) of previously received data blocks stored in a soft combining buffer (second storage medium) as spoken of on page 4, paragraph 36, lines 13-26.

Lee et al. (U.S. 6,882,660) teaches a demodulation unit 222 in Figure 2 that demodulates received radio data as spoken of on column 4, lines 48-51.

Lee also teaches on column 6, lines 59-63, that if a retransmission is detected, the layer 1 of the reception side restores/combines the received data repeatedly predetermined times using a maximal ratio combining (MRC) process.

Mahe (U.S. 6,535,488) teaches the concept of comparing message address fields of a received message and a previously received message in order to detect a retransmitted message as spoken of on column 11, lines 7-18.

However, *Malkamaki, Lee, Mahe*, and the other prior art of record fail to teach the combination of “determining whether the received packet is a retransmitted packet by comparing an address field of the received packet with a corresponding address field of a previous packet stored in a second storage medium; and if the received packet is the retransmitted packet, combining the received packet with the previous packet using a maximum ratio combining method”.

Regarding claims **2, 4, 6-8, and 25**, these claims are further limiting to claim **1** and are thus also allowable over the prior art of record.

Regarding claim **9**, *Malkamaki (U.S. 2002/0172208)* teaches the reception of various physical channels used to convey data blocks (received packet) and respective sequence numbers by a PHY module 12c (first storage medium) as spoken of on page 3, paragraph 34.

Malkamaki also teaches the determining of whether a received data block (packet) is a retransmitted data block by comparison of the sequence number (field) of the received data block to sequence numbers (corresponding field) of previously received data blocks stored in a soft combining buffer (second storage medium) as spoken of on page 4, paragraph 36, lines 13-26.

Lee et al. (U.S. 6,882,660) teaches a demodulation unit 222 in Figure 2 that demodulates received radio data as spoken of on column 4, lines 48-51.

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Lee also teaches on column 6, lines 59-63, that if a retransmission is detected, the layer 1 of the reception side restores/combines the received data repeatedly predetermined times using a maximal ratio combining (MRC) process.

However, *Malkamaki, Lee*, as well as the other prior art of record fail to teach the combination of "comparing corresponding PLCP and MAC headers of the received packet and a previously received packet with error stored in a second storage medium to determine whether the received packet is a retransmitted packet; and if so, combining the received packet with the previous packet using a maximum ratio combining method".

Regarding claims **10-15**, these claims are further limiting to claim **9** and are also allowable over the prior art of record.

Regarding claims **16-19, 21, 23, 24, and 26**, these claims are allowable for the reasons indicated in the previous Office Action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached at (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mjm *MM*

Michael J. Moore, Jr.
Examiner
Art Unit 2619

Wing F. Chan
10/15/07
WING CHAN
SUPERVISORY PATENT EXAMINER